

SECTION 2

CHARACTERISTICS OF THE CORRIDOR

2.1 OVERVIEW

SR 89A is a north-south state highway that provides regional access from Prescott, Arizona to Flagstaff. It generally traverses through the City of Sedona on an east-west alignment. The City of Sedona can be divided into two distinct areas, the first being the Uptown/Oak Creek section of the city which is located along the alignment of Oak Creek, within Coconino County. The second section of the city is known as West Sedona and is located generally west of Soldiers Wash within Yavapai County. SR 89A is the only roadway connection linking these two sections of the city, and therefore, is a critical piece of Sedona's transportation system.

The study area for the Soldiers Pass Area Traffic Study is located within West Sedona and begins on SR 89A at approximately Posse Ground Road and extends along SR 89A through Airport Road. The study area also includes the circulation systems for the neighborhoods and commercial areas that access SR 89A throughout these limits. An overview of the corridor is depicted in Figure 2.1.

2.2 MAJOR FEATURES OF THE CORRIDOR

SR 89A

The highway is a principle arterial providing two through lanes in each direction and a continuous left turn lane. There is an attached continuous sidewalk along both sides of the highway. Within the study area there is one traffic signal located at Soldiers Pass Road. Soldiers Pass Road provides access to residential neighborhoods and commercial areas located north of the highway, but the roadway does not extend south of SR 89A. Immediately south of the Soldiers Pass Road intersection is Biddle's Outdoor, whose driveway forms the fourth leg of the signalized intersection. Therefore, no neighborhoods or major traffic generators south of the highway (other than Biddle's) within the study area currently have access to this signalized intersection.

West Sedona Elementary School

The West Sedona Elementary School is located approximately one half mile north of SR 89A near the intersection of Posse Ground Road and Carruth Drive. The school serves several neighborhoods throughout Sedona and many students arrive by school bus or are dropped off by parents. Most vehicles access the school by using SR 89A to either Posse Ground Road or Soldiers Pass Road, therefore traffic operations at both of these intersections are impacted by traffic to and from accessing the West Sedona Elementary School. The current preferred route for school buses to access the area is via the traffic signal located at SR 89A and Soldiers Pass Road. Maintaining acceptable access to SR 89A from the West Sedona Elementary School is a primary objective of this study.

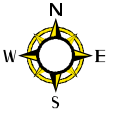


Figure 2.1

Corridor Overview
Soldiers Pass Road Area Traffic Study

Airport Mesa

South of SR 89A approximately one-half mile is Airport Mesa. The Sedona Airport and several other businesses are located on top of the mesa, and access is provided from SR 89A along Airport Road. Since Airport Mesa towers above this section of the city, it has become a popular location to watch the sun set behind the red rock formations surrounding the area. Additionally, Airport Road traverses a section of the Coconino National Forest between SR 89A and the Sedona Airport, and a trailhead has been established along the road. Airport Road has become a popular destination for tourists as well as local residents. Traffic volumes at the intersection between Airport Road and SR 89A have grown dramatically over the past several years, and excessive delays at this intersection have been reported as vehicles wait to access the highway. Providing reasonable access to SR 89A for traffic to and from Airport Mesa is a key objective of this study.

2.2 ADJACENT LAND USES AND EXISTING ACCESS

The study area is comprised of a mixture of commercial and residential land uses, located along both sides of SR 89A.

Old Marketplace

This large commercial development is located north and west of the intersection between Soldiers Pass Road and SR 89A. The development includes a mixture of service oriented commercial businesses, including a bank, various retail shops and a grocery store. Access is primarily provided at a driveway entrance opposite Saddlerock Circle, however secondary access is provided further west along SR 89A and via a connection to Soldiers Pass Road.

North Airport Road

Generally north and east of the Soldiers Pass Road intersection with SR89A is a mixture of commercial businesses along North Airport Road. The land uses include office suites, a hotel property, and a church. These properties are provided access to SR 89A at the intersection of North Airport Road (opposite Airport Road) or by traversing to the traffic signal at Soldiers Pass Road.

St. John Vianney Church

Located north of SR 89A along Soldiers Pass Road is St. John Vianney Church. This church is reported to have over 900 parishioners and constitutes a significant traffic generator before and after church events. Access is provided on Soldiers Pass Road, which allows traffic to enter SR 89A through the existing traffic signal.

Saddlerock Homes

Located south of SR 89A in the area bounded approximately by Airport Road on the east and south, and Saddlerock Circle on the west, is the Saddlerock Homes neighborhood. This neighborhood has limited access to other parts of the City of Sedona, and residents must access SR 89A to travel to most parts of the city. The residents have access to the highway at two locations, Saddlerock Circle or Airport Road. Accessing the highway at Saddlerock Circle is complicated by the driveway to Old Marketplace being located directly across this intersection, and excessive delays have been reported at this intersection. The second access opportunity to the highway is at Airport Road; however delays to access the highway are excessive at this location also. Providing convenient access to SR 89A for the residents of Saddlerock Homes is a primary objective of this traffic study.

Copper Vista Estates

Located south of SR 89A in the area bounded by Airport Road on the west and the Coconino County Line on the east is the neighborhood of Copper Vista Estates. Similar to Saddlerock Homes, residents of this neighborhood must access SR 89A to travel to most parts of the city. The primary access point to SR 89A is Airport Road, and providing access to a controlled intersection for residents of this neighborhood will be included in proposed solutions.

Les Springs

Located south of SR 89A immediately east of the Coconino County Line is the Les Springs neighborhood. This neighborhood includes two access points in and out of the area, one is Les Springs Drive at SR 89A, and the second is using Brims Mesa Road through the Copper Vista Estates to Airport Road. The Les Springs intersection with SR 89A does not include a traffic signal, and therefore residents experience delays attempting to access the highway.

Rolling Hills

The Rolling Hills neighborhood is located east of Les Springs. This neighborhood includes only one access point onto SR 89A, and there are no other access locations into the area. There is a business located on SR 89A across from this access known as Real Estate Central, which has two access points to SR 89A. The Rolling Hills leg of the SR 89A intersection includes very tight curvature for vehicles entering from SR 89A, and the roadway traverses a steep down-grade as it approaches SR 89A. This undesirable geometry may contribute to the length of delays vehicles experience as they access the highway.

Neighborhoods North of SR 89A

There are several neighborhoods north of SR 89A, including Casa Contenta, San Patricio Estates, and Vista Montana. These neighborhoods have access to Soldiers Pass Road, Posse Ground Road, and Mountain Shadows Drive to the west. Traffic signals along SR 89A are located at both Soldiers Pass Road and Mountain Shadows Drive. Therefore the ability to utilize a controlled intersection is more accessible than it is for the neighborhoods located south of the highway.

2.3 ROADWAY CHARACTERISTICS

SR 89A

SR 89A is an urban arterial roadway including two through lanes in each direction, attached sidewalks, and curb and gutters. Figure 2.2 depicts the existing cross section for SR 89A; existing lane widths on the highway are 12 feet. Numerous driveways and side streets intersect the highway with a high amount of frequency and a continuous left turn lane is provided through the study limits. Posted speeds along SR 89A are 40 mph throughout the study area. Existing lane arrangements for the key intersections along SR 89A are depicted in Figure 2.3. The profile of SR 89A is relatively level from Posse Ground Road to Airport Road, then the roadway begins 3% down grade east of Airport Road which eventually increases to a 6% down grade.

Airport Road

Airport Road is a collector roadway with one lane in each direction with limited shoulders and no sidewalks. There are a limited number of driveways and intersections along the roadway due to the topography of Airport Mesa. Near the intersection with SR 89A there are several small businesses, and several driveways are located in this area. Posted speeds along the roadway vary from 25 mph to 15 mph. The profile of Airport Road generally climbs up Airport Mesa as it traverses from SR 89A, obtaining grades in excess of 6% in places.

Soldiers Pass Road

Soldiers Pass Road is a collector roadway including one lane in each direction with turn lanes at select locations. Paved shoulders are not provided, and a continuous sidewalk is located along the west side of the street. Within the first quarter of a mile north of SR 89A, access is provided to several small businesses along the roadway, in addition to an intersection with North Airport Road. Posted speeds are set at 25 mph.

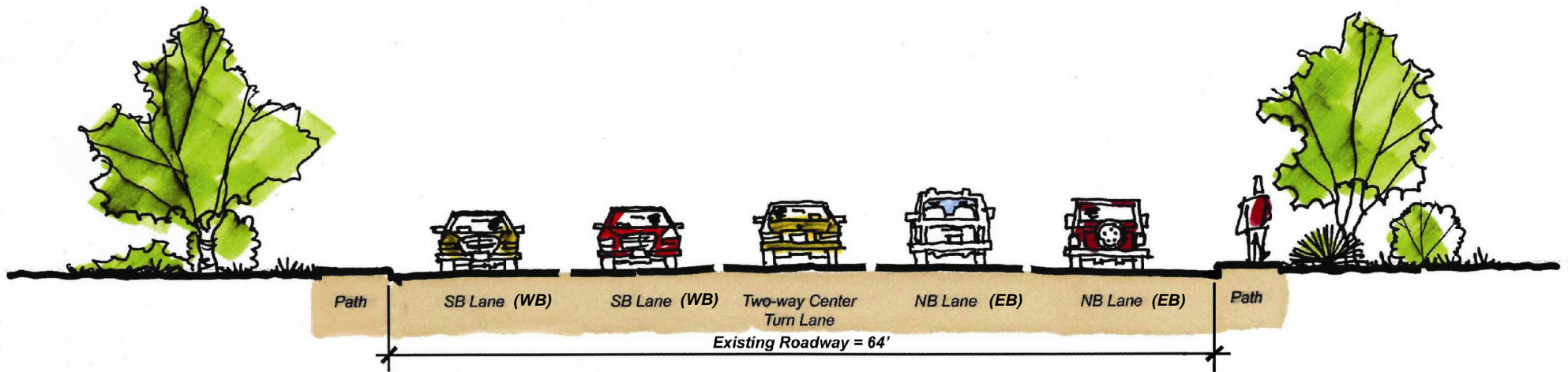
North Airport Road

This roadway is a privately owned street, and provides one lane in each direction and includes a continuous gutter along each side of the roadway. The roadway begins at the intersection with SR 89A (opposite of Airport Road), traverses north and then turns westerly to intersect with Soldiers Pass Road. Access is provided to a hotel property, and patrons are reported to park along each side of the roadway.

Parking which backs onto North Airport Road is also provided near the intersection with Soldiers Pass Road. The profile of the roadway climbs from SR 89A to the intersection with Soldiers Pass Road obtaining a maximum grade of 6%.

Posse Ground Road

This collector roadway intersects with SR 89A approximately one-half mile west of Soldiers Pass Road and provides one lane in each direction. The roadway traverses through the San Patricio Estates neighborhood before providing access to the West Sedona Elementary School. The profile is generally rolling in nature, and no sidewalks or shoulders are provided. There has been interest expressed by surrounding neighborhoods to implement traffic calming measures to limit the amount of cut through traffic on Posse Ground Road. This may include restricting movements at the SR 89A intersection with Posse Ground Road to deter traffic from traversing through the San Patricio Estates.



SR 89A Cross Section

NOTE: SR 89A is a north-south state highway, but traverses Sedona in an east-west alignment.

Figure 2.2

SR 89A Existing Typical Section
Soldiers Pass Road Area Traffic Study

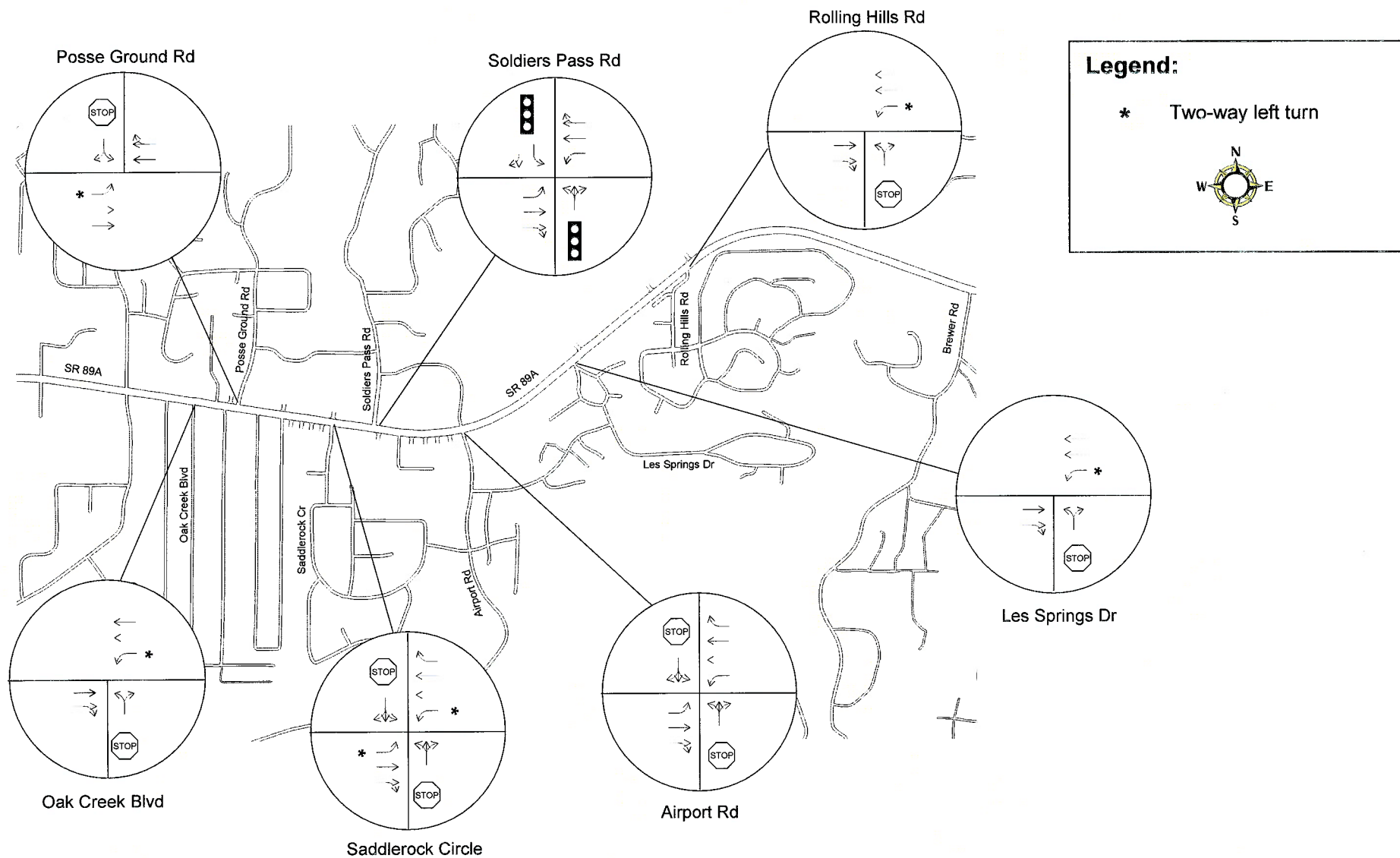


Figure 2.3

Existing Intersection Lane Configurations
Soldiers Pass Road Area Traffic Study

2.4 *MULTI MODAL FACILITIES*

There are limited existing multi-modal facilities located within the study area. Continuous sidewalks are provided on each side of SR 89A, however the high level of turning movements may not promote pedestrian or bicycle movements along the highway. Very few of the local streets within the neighborhoods north or south of the highway provide sidewalks or pedestrian accommodations. No bike lanes or facilities exist on SR 89A or the adjacent cross roads. The City of Sedona has an approved transit plan, although there are no existing bus pull-outs on SR 89A. There is a strong desire to enhance the multi modal opportunities in this part of the city, and alternatives proposed to meet the objectives of this study will include some enhancements to the system.